California Integrated Water Quality System (CIWQS) and Electronic Self Monitoring Reports (eSMR)

What we will cover today

- Brief Introduction to CIWQS
- eSMR
- Using the Report Builder Module
 - Numeric requirements, converting data, data submission, etc.
- Walkthrough of data conversion tool

What is CIWQS?

- Web access to:
 - Locations (facilities) of interest
 - Associated people and organizations
 - Orders (e.g., permits), including requirements and limits
 - Inspection scheduling and results tracking
 - Violation management
 - Enforcement Action development and tracking
 - Penalties and invoices
- Allows Dischargers to electronically submit self monitoring reports
- Share data with the State financial system (AFBS) and USEPA IDEF/PCS
- Desktop-based and Web-Based GIS module
- Integrates functionality of existing SWRCB systems and adds new functionality
- Dischargers will initially have access to only eSMR module

CIWOS

- "Integrated"
 - CIWQS integrates
 - Permit requirements with
 - The "place" with
 - The "people" with
 - The SMR (self monitoring report)
 - CIWQS does not automatically issue a notice of violation and fine
 - All "allegations" must be reviewed by Board staff

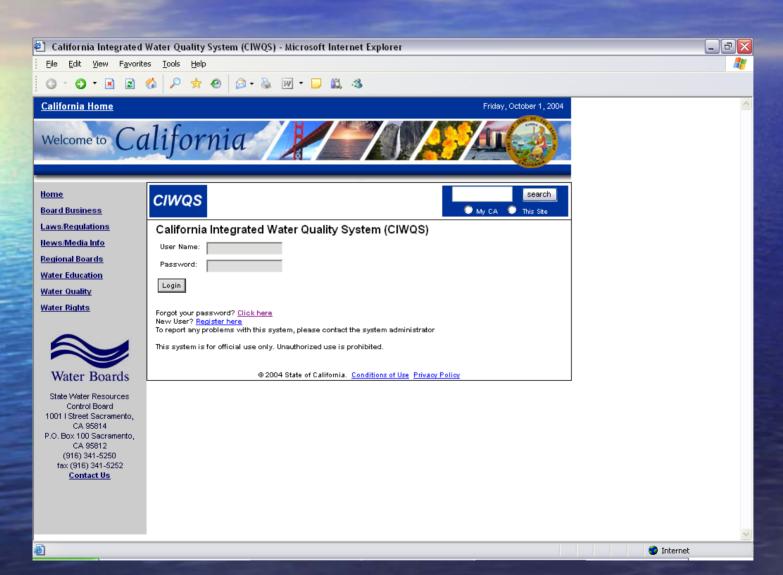
CIWQS Help Center

- SWRCB has created the CIWQS Help Center
 - Web Site
 - Phone Support
 - Outreach Materials and Training
- <u>http://www.waterboards.ca.gov/ciwgs/index.html</u>
- 1-866-79-CIWQS (M-F, 8-5)
- Help Center is also Processing DMR's
- List Server available at http://www.waterboards.ca.gov/lyrisforms/swrcb_ subscribe.html.

What is eSMR?

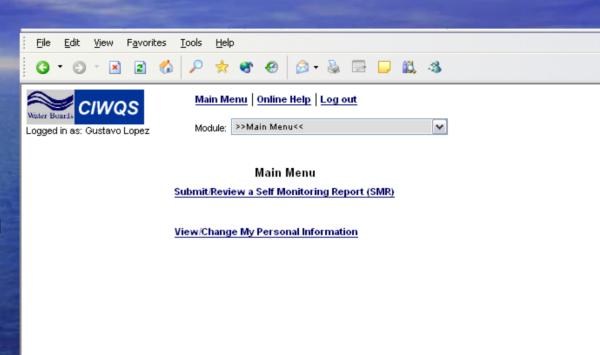
- Electronically submit SMR
- Based on permit requirements loaded into CIWOS
- Provides an "error check" to predetermine potential non-compliance
- Includes security: only authorized users can view/enter data

Using CIWQS



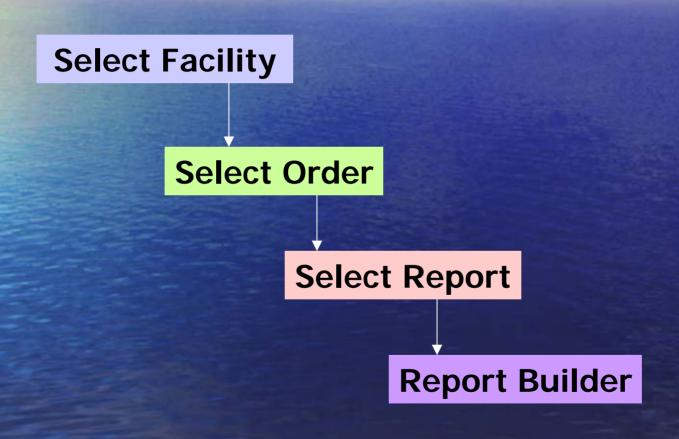
Using CIWQS

- Dischargers will see two modules on their Main Page
 - Submit/Review aSelf MonitoringReport (SMR)
 - View/Change MyPersonalInformation

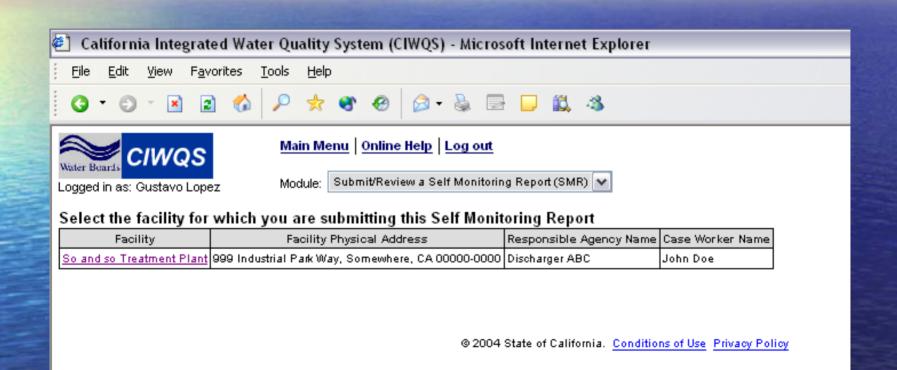


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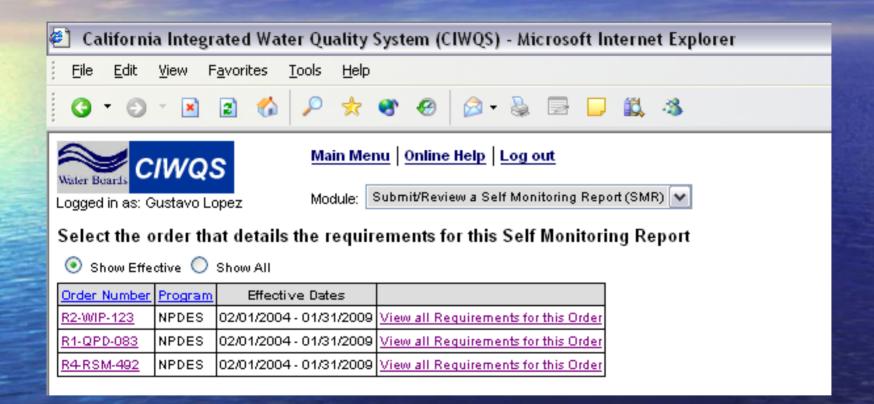
Submit/Review a Self Monitoring Report (SMR)



Select Facility

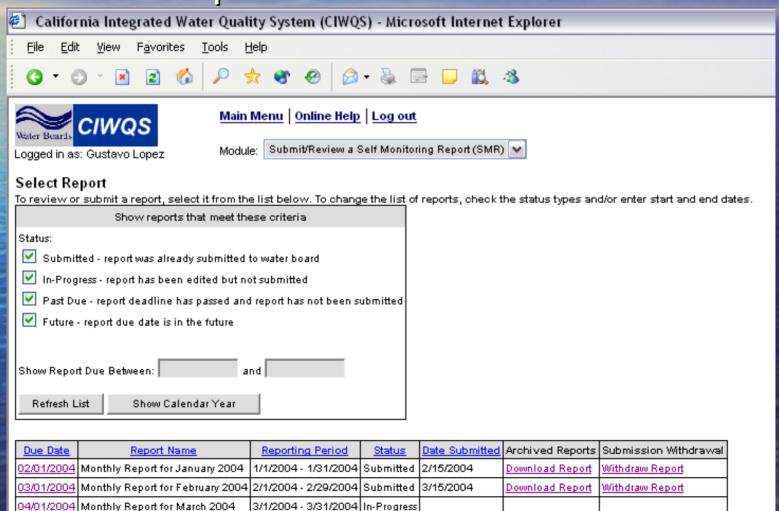


Select Order



Select Report Screen

You can view submitted, past-due, current, and future reports



Report Builder Screen

View Requirements No Discharge Narrative Pre-Calculated EDF Raw Data Data Summary File Attachments Error Check Cover Letter

- View Requirements
 - Report of requirements to be reported on in this SMR
- No Discharge
 - Report locations without discharge during reporting period
- Narrative
 - Report compliance for narrative requirements (yes, no, n/a)
- Pre-Calculated, CDF, EDF, Raw Data
 - Report compliance for limit/monitoring requirements
- **Data Summary**
 - View all of your data before submission
- File Attachments
 - Attach supporting information to submission
- **Error Check**
 - Check for potential errors and non-compliance in submission
- **Cover Letter**
 - Prepare submission cover letter, certify/sign, and submit

Reporting Your Requirements

- Narrative
 - Narrative tab
- Numeric
 - Pre-calculated tab
 - Raw Data tab
 - EDF/CDF tab

Numeric Requirements

- In most cases, CIWQS can run calculations and determine compliance based on sample data.
- In some cases, the limit is not a fixed number (e.g., dependant on pH, temperature, or an external factor) and the limit must be reported, as well as the result (use the "pre-calculated" screen).
- In some cases, it is not feasible for CIWQS to compute the "summary" value based on raw data (use the "pre-calculated" screen).

Pre-Calculated Screen

Enter calculated values for each of the line items listed under each monitoring location.									
Save Monitoring Location: MON001 🕶									
Parameter	Bound	Li mit	Units	Result	Units	Comments	Requirement Text		
Ammonia, Total	<=		mg/l		mg/l	A			

Options for Entering Numeric Data

- Raw Data Screen
- CIWQS Data Format (CDF)
- Electronic Deliverable Format (EDF)
- Combination

Report Builder - Raw Data

View Requirements No Discharge Narrative Pre-Calculated EDF Raw Data Data Summary File Attachments Error Check Cover Letter Water Board Notes												
Enter measured sample values for each of the line items listed under each monitoring location.												
Select a sampling event date/time: 2/1/2004 at 08:00:00 or Create New												
Monitoring Location: M1 💌												
Parameter	Minimum Sampling Frequency	Sample Type	Sample Medium	Result	Units	Analytical Method	Method Detection Limit (Optional)	Non- Detect?	Minimum Level (Optional)	Sample Analysis Date (Optional)	Sample Analysis Time (Optional)	
Save												
Copper	Daily	Grab	Soil		mg/L	35465 💌						<u>delete</u> <u>duplicate</u>
Lead	Daily	Grab	Fish Tissue		mg/L	35465 🕶						<u>delete</u> <u>duplicate</u>
Zinc	Daily	Grab	Water		mg/L	35465 🕶						<u>delete</u> <u>duplicate</u>

CIWQS Required Data Fields

- Monitoring location
- Scenario (if applicable)
 - A Scenario ID is applicable only if the NPDES Permit specifies a scenario in which samples are to be taken or analyzed.
 - Examples of Scenario IDs are "Dilution <20:1" and "Dilution >=20:1"
- Sample collection date
- Sample collection time
- Sample medium
- Analytical method
- Sample analysis date
- Parameter concentration (if applicable)
 - Dissolved, Total Recoverable, Total

CIWQS Required Data Fields

- Parameter
- Analytical result
- Analytical result qualifier (= or <)</p>
- Analytical Method Detection Limit (MDL)
- Minimum Level (ML) (if detected, but not quantified)
 - If the parameter is detected but not quantified (DNO), choose "=" in the <u>Analytical Result Qualifier</u> section and enter the minimum level (ML) in the <u>Minimum Level (ML)</u> section.
 - If the sample result is non-detect (ND), enter the method detection limit (MDL) and choose "<" in the <u>Analytical Result Qualifier</u> section.
- Units

CIWOS Data Format Benefits

- For those that want an easy way to convert Excel files to a format that CIWQS accepts
- Excel-based tool
- Only has the 14 required fields required by CIWQS
- Create a ZIP file with a general information file (.txt) and a comma-separated values (.CSV) file
- Dischargers can create a template
- Still uses EDF format (fields/columns and valid values)
- We'll do a demonstration at the end of this presentation

The Electronic Deliverable Format

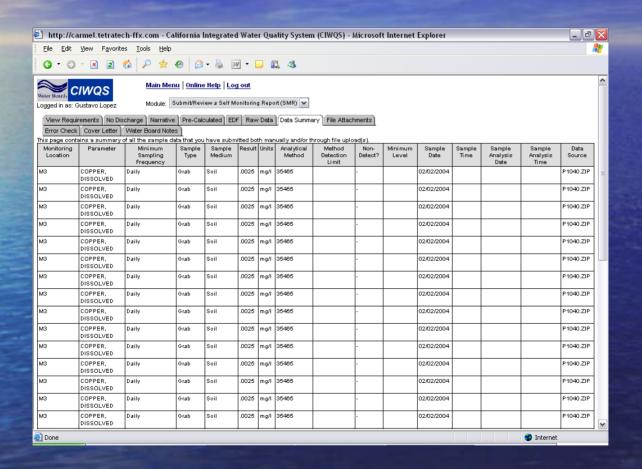
- Developed by Arsenault Legg, inc.
 - <u>http://www.arsenaultlegg.com/</u>
- Originally for the Corps of Engineers
- Used by SWRCB for GeoTracker (UST)
- ASCII-based format, compressed with ZIP
- Free tools are available from Arsenault Legg to import from certain other formats and validate data
- Requires the use of pre-defined "code" values
- Some LIMS include EDF export capability (check with your vendor)

Combination

- Sample data can be uploaded through the raw data entry screen or as an EDF or CDF file or a combination of all three formats.
- Multiple EDF or CDF files may be uploaded for each SMR submission.
- If you want, you can authorize your lab to upload EDF or CDF files on your behalf.

 You will still be able to review the data before certification and submission.

Sample Data Summary Screen



Be Prepared – Think Ahead

- Your monitoring points will receive identifiers:
 - Influent (M-INF or M-INFA, M-INFB...)
 - Effluent (M-001, M-002... or M-001A, M-001B...)
 - Internal (M-INT or M-INTA, M-INTB...)
 - Surface Water (R-001, R-002...)
 - Upstream Surface Water (R-001U, R-002U...)
 - Downstream Surface Water (R-001D, R-002D...)
- Inform your lab and make the changes within your process and records!
- Your requirements will match your Monitoring and Reporting Program (MRP)
 - Check the CIWQS web site for policy statements regarding DNQ, continuous monitoring, code values, etc.